# **15-DAY EXPRESS TERMS** FOR PROPOSED BUILDING STANDARDS

# OF THE

# DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT REGARDING THE AMENDMENT OF THE 2016 CALIFORNIA PLUMBING CODE **CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 5**

(HCD 02/16)

The Department of Housing and Community Development (HCD) proposes to make necessary changes to be included into the 2016 edition of the California Plumbing Code (CPC), including any necessary amendments, as presented on the following pages:

### **LEGEND FOR EXPRESS TERMS:**

- UPC language with new California amendments: UPC language shown in normal Arial 9 point; California amendments to UPC text shown underlined and in italics with vertical bar in left margin.
- Existing California amendments being modified: All such existing language shown in *italics*, modified language is underlined or shown in strikeout with vertical bar in left margin.
- Existing California amendments with no modification: All such existing language shown in italics, modified model code language is shown in strikeout.
- 4. Text not being modified: All language not displayed in full is shown as "..." (i.e., ellipsis).
- 5. Repealed text: All language shown in strikeout with vertical bar in left margin.
- Amended, adopted or repealed language after public hearing: All language is shown in double underline or double strikeout; with vertical bar in left margin.
- 7. Notation: Authority and Reference citations are provided at the end of each action.

# 1. HCD proposes to amend Chapter 2 as follows:

# CHAPTER 2 DEFINITIONS

### 205.0

Construction Site. A parcel of land bounded by lot line(s) or a designated portion of a public right-of-way where construction is taking place. A construction site may include, but not be limited to, buildings and accessory structures, walks, sidewalks, curbs, curb ramps, parking facilities, planting areas, pools, promenades, exterior gathering or assembly areas, raised or depressed paved areas, open spaces, golf courses, and/or landscape areas.

### Rationale for Change:

HCD proposes an editorial correction to the original proposal after coordination with the Building Standards Commission (BSC) and the Department of Water Resources (DWR). There is no intended change in regulatory effect.

### NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17921, 17921.5, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18873.4, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1, and Water Code Section 14877.3, 13552.2, 13552.4, 13553.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

# 2. <u>HCD proposes to amend Chapter 15, Sections 1501, 1502, and 1504 as follows.</u> <u>HCD proposes to not adopt Section 1503.</u>

# CHAPTER 15 ALTERNATE WATER SOURCES FOR NONPOTABLE APPLICATIONS

1501.2 System Design. (HGD 1) Alternate water source systems complying with this chapter shall be designed by a person who demonstrates competency to design the alternate water source system as required by the Enforcing Agency. The Enforcing Agency may also require plans and specifications to be prepared by a licensed design professional for Complex Systems. Compenents, piping, and fittings used in any alternate water source system shall be listed.

Alternate water source systems shall be designed in accordance with this chapter by a registered design professional or who demonstrates competency to design the alternate water source system as required by the Authority Having Jurisdiction. Components, piping, and fittings used in an alternate water source system shall be listed.

## **Exceptions:**

- (1) A registered design professional is not required to design gray water systems having a maximum discharge capacity of 250 gallons per day (gal/d) (0.011 L/s) for single family and multi-family dwellings.
- (2) A registered design professional is not required to design an on-site treated nonpotable water system for single family dwellings having a maximum discharge capacity of 250 gal/d (0.011 L/s).
- (3) Irrigation design plans shall meet the requirements of the California Code of Regulations, Title 23, Division 2, Chapter 2.7, Model Water Efficient Landscape Ordinance.

## Rationale for Change:

For the 45-day public comment period, which ended on May 1, 2017, HCD initially proposed to reinstate a California amendment omitted from the 2016 CPC, and to further modify the language by providing a reference to the California Code of Regulations, Title 23, Model Water Efficient Landscape Ordinance (MWELO). MWELO addresses irrigation design plans, and currently Section 1501.2 does not address the requirements for irrigation design plans.

After internal review and coordination with BSC and DWR, HCD staff discovered that the language, as proposed to be reinstated for the 45-Day Public Comment Period, provides the same measures as the model code language in the 2015 Uniform Plumbing Code. As a result, HCD proposes to adopt the model code language in Section 1501.2 (including Exceptions 1 and 2), and keep the original proposal addressing irrigation design plans as newly numbered Exception 3. The proposed modification provides clarity and consistency to the code user. There is no intended change in regulatory effect.

**1501.6 Operation and Maintenance Manual**. An operation and maintenance manual for gray water, <u>and</u> on-site treated <u>nonpotable</u> water, <u>and recycled water supply</u> systems required to have a permit in accordance with Section<u>s</u> 1501.3, <u>1503.2 and 1504.2</u> shall be supplied to the building owner by the system designer *or installer*. The operating and maintenance manual shall include the following:

- (1) Diagram(s) of the entire system and the location of system components.
- (2) Instructions on operating and maintaining the system.
- (3) Instructions on maintaining the required water quality for on-site treated nonpotable water systems.
- (4) Details on startup, shutdown, and deactivating the system for maintenance, repair, or other purposes.
- (5) Applicable testing, inspection, and maintenance frequencies in accordance with Section 1501.5.
- (6) A method of contacting the installer and/or manufacturer(s).
- (7) Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.

#### Rationale for Change:

For the 45-day public comment period, which ended on May 1, 2017, HCD initially proposed to modify the existing language in Section 1501.6 by incorporating the terms "nonpotable water" and "recycled water systems," and to provide references to sections containing the requirements for different type of water systems. After coordination with BSC and DWR, HCD proposes a modification to the original proposal to align with the defined term "(recycled water supply system)" proposed in Chapter 2. The proposed modification provides clarity and consistency to the code user. There is no intended change in regulatory effect.

**1501.11 Inspection and Testing.** Alternate water source systems shall be inspected and tested in accordance with Section 1501.11.1 and Section 1501.11.2 *and/or as required by the Authority Having Jurisdiction*.

- **1501.11.1 Supply System Inspection and Test.** (No change to text)
- 1501.11.2 Cross-Connection Inspection and Testing. (No change to text)
  - 1501.11.2.1 Visual System Inspection. (No change to text)
  - **1501.11.2.2 Cross-Connection Test.** The procedure for determining cross-connection shall be followed by the applicant <u>A cross-connection test shall be performed</u> in the presence of the Authority Having Jurisdiction and <u>or</u> other authorities having jurisdiction to determine whether a cross connection has occurred as follows:
  - (1) The potable water system shall be activated and pressurized. The alternate water source system shall be shut down, depressurized, and drained.

- (2) The potable water system shall remain pressurized for a minimum period of time specified by the Authority Having Jurisdiction while the alternate water source system is empty. The minimum period the alternate water source system is to remain depressurized shall be determined on a case-by-case basis, taking into account the size and complexity of the potable and the alternate water source distribution systems, but in no case shall that period be less than 1 hour.
- (3) The drain on the alternate water source system shall be checked for flow during the test, and <u>all</u> fixtures, potable and alternate water source, shall be tested and inspected for flow. Flow from an alternate water source system outlet indicates a cross-connection. No flow from a potable water outlet shall indicate that it is connected to the alternate water source system.
- (4) The potable water system shall then be depressurized and drained.
- (5) The alternate water source system shall then be activated and pressurized.

When an alternate water source is not available for the initial test, a temporary connection to a potable water supply shall be required. At the conclusion of the test, the temporary connection to the potable water supply shall be disconnected.

- (6) The alternate water source system shall remain pressurized for a minimum period of time specified by the Authority Having Jurisdiction while the potable water system is empty. The minimum period the potable water system is to remain depressurized shall be determined on a case-by-case basis, but in no case shall that period be less than 1 hour.
- (7) Fixtures, potable and alternate water source, shall be tested and inspected for flow. Flow from a potable water system outlet indicates a cross-connection. No flow from an alternate water source outlet will indicate that it is connected to the potable water system.
- (8) The drain on the potable water system shall be checked for flow during the test and at the end test.
- (9) Where there is no flow detected in the fixtures which would indicate a cross-connection, the potable water system shall be repressurized.

# Rationale for Change:

HCD proposes an editorial correction to the original proposal in item 5 after coordination with the BSC and the DWR. There is no intended change in regulatory effect.

1504.0 On-Site Treated Nonpotable Gray Water Systems.

...

**1504.4 Connections to Potable or Reclaimed (Recycled) Water Systems.** On-site treated nonpotable *gray* water systems shall have no <u>direct</u> <u>unprotected</u> connection to a potable water supply or reclaimed (recycled) water <u>supply</u> source system.

### **Exceptions:**

- 1. Potable or reclaimed (recycled) water is permitted to be used as makeup water for a non-pressurized storage tank provided the makeup water supply <u>inlet</u> is protected by an air gap, <u>reduced-pressure principle backflow preventer</u>, or other physical device which prevents backflow in accordance with this code.
- 2. A potable water supply may be connected temporarily for initial testing of the on-site treated nonpotable gray water system as required in Section 1501.11.2.2.

# **Rationale for Change:**

For the 45-day public comment period, which ended on May 1, 2017, HCD initially proposed to modify the existing language in Section 1504.4 to match the language in the model code, and to provide consistency with Title 17 of the California Code of Regulations. After coordination with BSC and DWR, HCD proposes a modification to the original proposal to align with the DWR amendment. The proposed modification provides clarity and consistency to the code user. There is no intended change in regulatory effect.

### NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17921, 17921.5, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18873.4, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1, and Water Code Section 14877.3, 13552.2, 13552.4, 13553.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.